

Application No. 10/804,761

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

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CLAIMS:

Claims 1-19 (canceled).

20. (Withdrawn) A method of treating a vertebral body having a superior endplate and an inferior endplate, comprising the steps of:

inserting an expandable container into an vertebral body;

expanding said container within said vertebral body;

injecting a first flowable material into said container under pressure, whereby said pressure supplies a distraction force to move said superior and inferior endplates apart; and

injecting a second flowable material different from said first flowable material into said container.

21. (Withdrawn) The method of claim 20 wherein at least one of said first and second flowable material is selected from the group comprising: bone cement, human bone graft allograft; human bone graft autograft; synthetic derived bone substitute; sulfate and/or calcium phosphate, hydroxylapatite.

22. (Previously Amended) A method of treating a vertebral body comprising the steps of:

creating a cavity in the vertebral body through an access aperture;

inserting a container into said vertebral body, said container having a fill passage coupled to said container;

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deploying said container within said vertebral body;
injecting a bone filler material into said container through said fill passage; and
injecting a flowable material different from said bone filler material into said
container through said fill passage.

Claims 23 - 27 (canceled).

28. (Previously Presented) A method of treating a vertebral body having cancellous bone therewithin comprising the steps of:

inserting a container into the cancellous bone of said vertebral body;
injecting a first bone filler into said container; and
injecting a second bone filler different from said first filler into said container.

29. (Previously Presented) The method of claim 28, wherein said first bone filler is selected to have a viscosity less than the viscosity of said second bone filler.

30. (Previously Presented) The method of claim 28, wherein said first bone filler is selected to have a chemical composition different from the chemical composition of said second bone filler.

31. (Previously Presented) The method of claim 28, wherein said first bone filler is selected to have a mechanical strength different from the mechanical strength of said second bone filler

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32. (Previously Presented) The method of claim 28 wherein said container is selected to be porous.

33. (Previously Presented) The method of claim 32, wherein said first bone filler is initially introduced into said container and wherein said second bone filler is then introduced into said container to push against said first bone filler until a portion of said first bone filler flows through the porous container and interdigitates with said cancellous bone of said vertebral body.

34. (Previously Presented) The method of claim 33, wherein said container is selected to be a woven mesh.

35. (Withdrawn) The method of claim 28, wherein said container is selected to be impermeable.

36. (Withdrawn) The method of claim 35, wherein said container is selected to be elastic.

37. (Withdrawn) The method of claim 35, wherein said container is selected to be inelastic.

38. (Canceled).

39. (Withdrawn) The method of claim 38 wherein said member is an expandable container having an interior capable of being filled with a substance.

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40. (Withdrawn) The method of claim 39 wherein said expandable container is comprised of an elastic material.

41. (Withdrawn) The method of claim 39 wherein said container is comprised of an inelastic material.

42. (Withdrawn) The method of claim 39 where in said expandable container is comprised of a permeable material.

43. (Withdrawn) The method of claim 39 wherein said expandable container is comprised of an impermeable material.

44. (Withdrawn) The method of claim 39 wherein a cavity is formed within said vertebral body and said expandable container is inserted into said cavity.

45. (Withdrawn) The method of claim 44 wherein said expandable container is inserted in an unexpanded condition into said cavity and expanded therein by the introduction of a substance within said container.

46. (Withdrawn) The method of claim 45 wherein said vertebral body is defined by a superior endplate and an inferior endplate and wherein said expandable container is expanded at a

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pressure sufficient to move the superior endplate and the inferior endplate relatively apart thereby restoring the vertebral body height.

47. (Withdrawn) The method of claim 46 wherein said substance introduced into said expandable container is bone filler.

48. (Withdrawn) The method of claim 47 wherein said bone filler is a hardenable substance introduced by injection into said container in a fluid state to expand said container and therein allowed to harden to maintain said container in said expanded state.

49. (Withdrawn) The method of claim 48 wherein said vertebral body comprises cancellous bone, wherein said cavity is formed within said cancellous bone, wherein said expandable container is permeable and disposed within said cavity and wherein said fluid bone filler is injected into said permeable container at a pressure sufficient to cause at least a portion of said bone filler to pass through said permeable container to interdigitate with said cancellous bone before said fluid bone filler hardens.

50. (Withdrawn) The method of claim 44 wherein said vertebral body comprises cancellous bone, said cavity is formed within said cancellous bone, and bone filler is introduced into said expandable container.

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51. (Withdrawn) The method of claim 50 wherein said container is permeable, wherein said bone filler is injected into said container in a fluid state under pressure to expand said container, said bone filler being introduced into said cancellous bone through said permeable container.

52. (Canceled).

53. (Withdrawn) The method of claim 52 wherein said expandable container is comprised of an elastic material.

54. (Withdrawn) The method of claim 52 wherein said expandable container is comprised of an inelastic material.

55. (Withdrawn) The method of claim 52 wherein said outer membrane of said expandable container is selected from the group of porous materials comprising meshes and screens.

56. (Withdrawn) The method of claim 52 wherein said vertebral body comprises cancellous bone therewithin and between said endplates, wherein a cavity is formed within said cancellous bone and said container is inserted into said cavity.

57. (Withdrawn) The method of claim 56 wherein the outer membrane of said expandable container is sufficiently porous to allow at least a portion of said substance to pass through and interdigitate with said cancellous bone to thereby reinforce and stabilize said vertebral body.

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58. (Withdrawn) The method of claim 57 wherein said substance is a hardenable bone filler introduced by injection into said container in a fluid state at a pressure to expand said container and to cause at least a portion of said fluid bone filler to pass through said outer membrane and interdigitate with said cancellous bone before said fluid bone filler hardens.

59. (Withdrawn) The method of claim 52 wherein said substance is selected from the group of bone filler materials comprising bone cement, human bone graft allograft, human bone graft autograft, synthetic bone substitute, sulfate and/or calcium phosphate, hydroxyapatite and bioresorbable polymers.

60. (Withdrawn) The method of claim 52 wherein said container has a fill passage coupled to said container and wherein said fill passage is sealed upon filling said container with a sufficient volume of substance.

61. (Withdrawn) The method of claim 56 wherein a substance is introduced into said cancellous bone adjacent said container.

62. (Withdrawn) The method of claim 61 wherein the outer membrane of said expandable container is sufficiently porous to allow at least a portion of said substance to pass through said membrane, said substance introduced into said cancellous bone adjacent said container being a portion of said substance passing through membrane.

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63-78. (Canceled).

79. (Previously Presented) The method of claim 28, wherein said first bone filler is selected to have a viscosity greater than the viscosity of said second bone filler.